

FIGURE 1

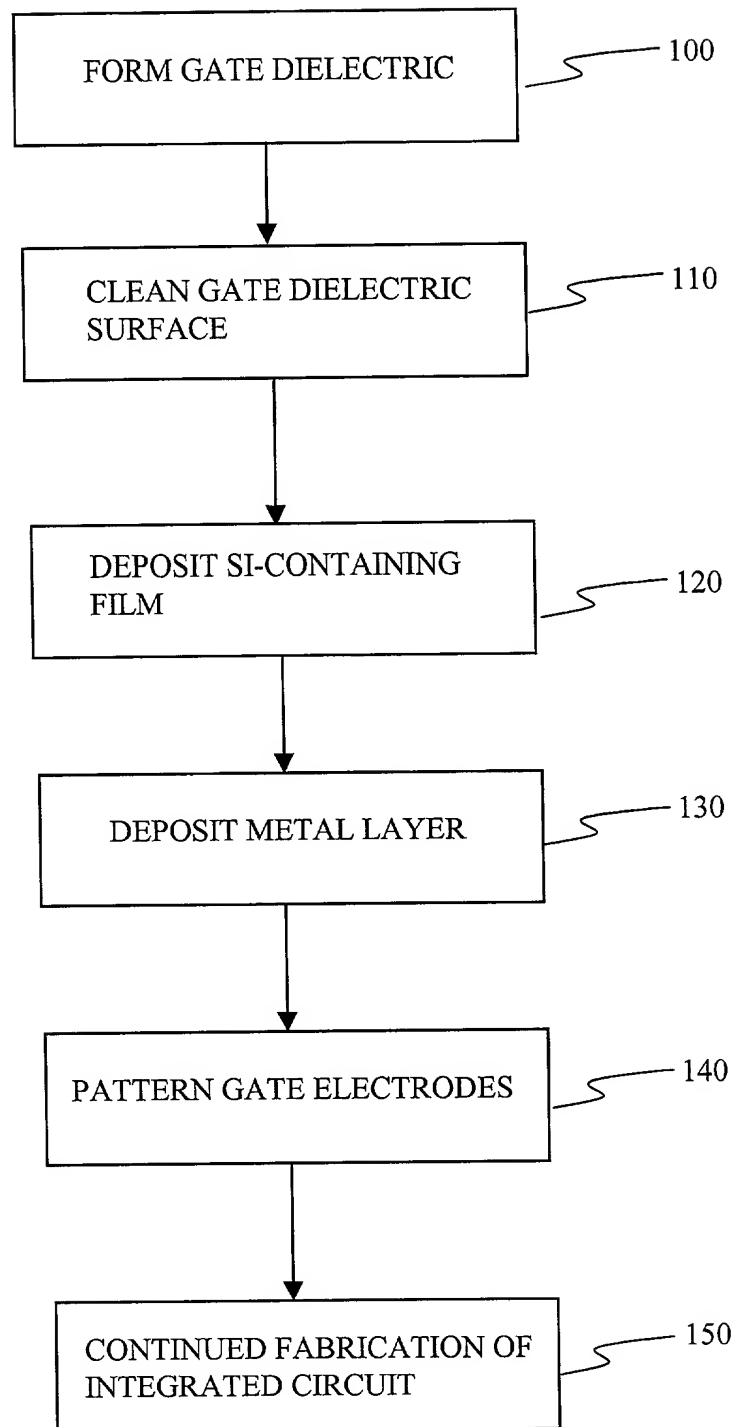


FIGURE 2

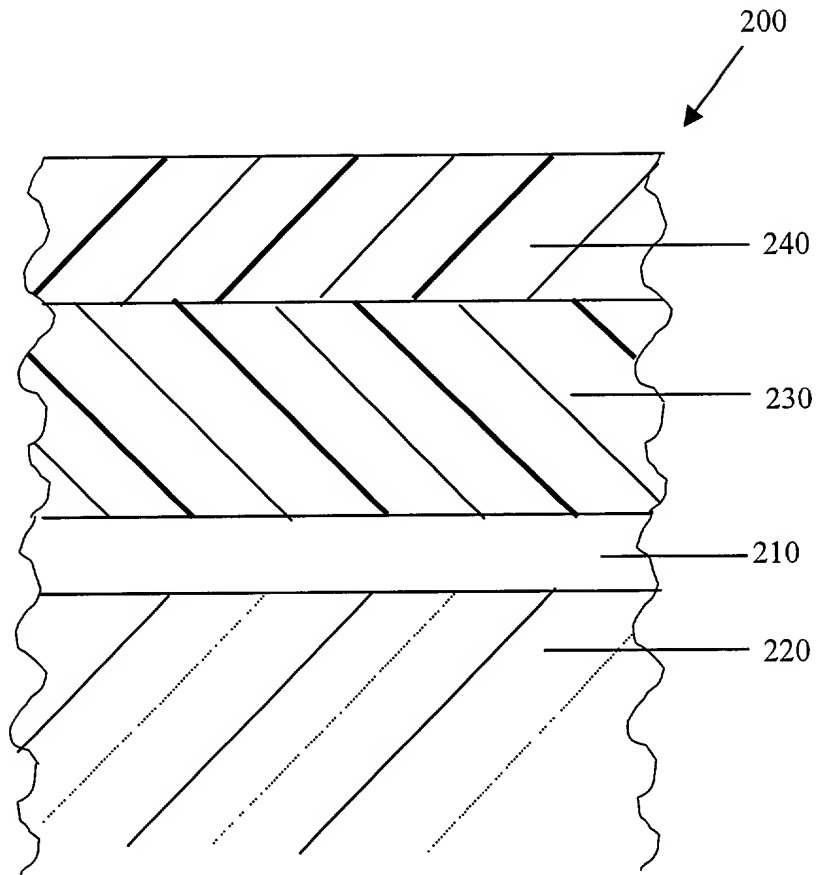


FIGURE 3

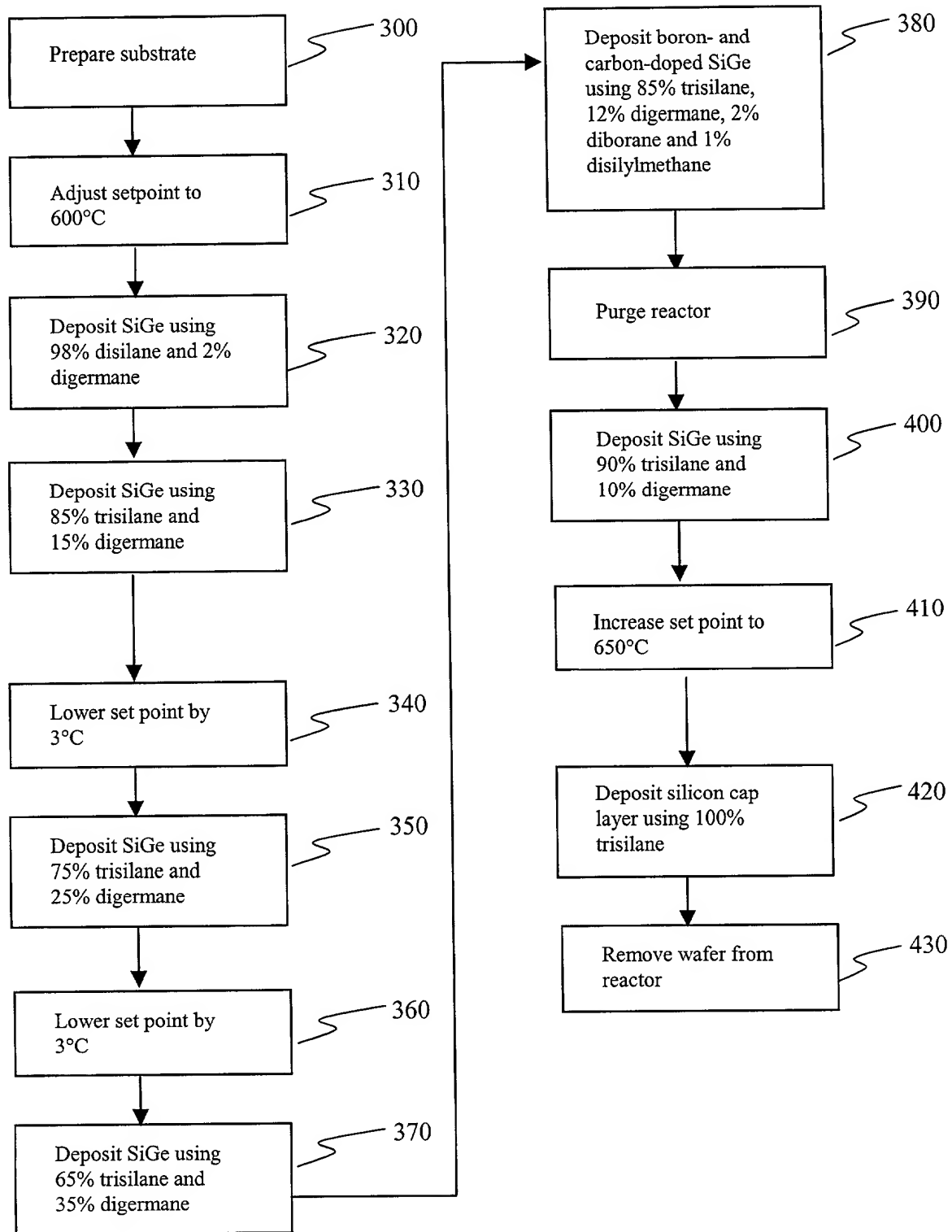


Figure 4: Preferred Ge concentration profile for epitaxial Si-Ge layer in base layer of a heterojunction bipolar transistor

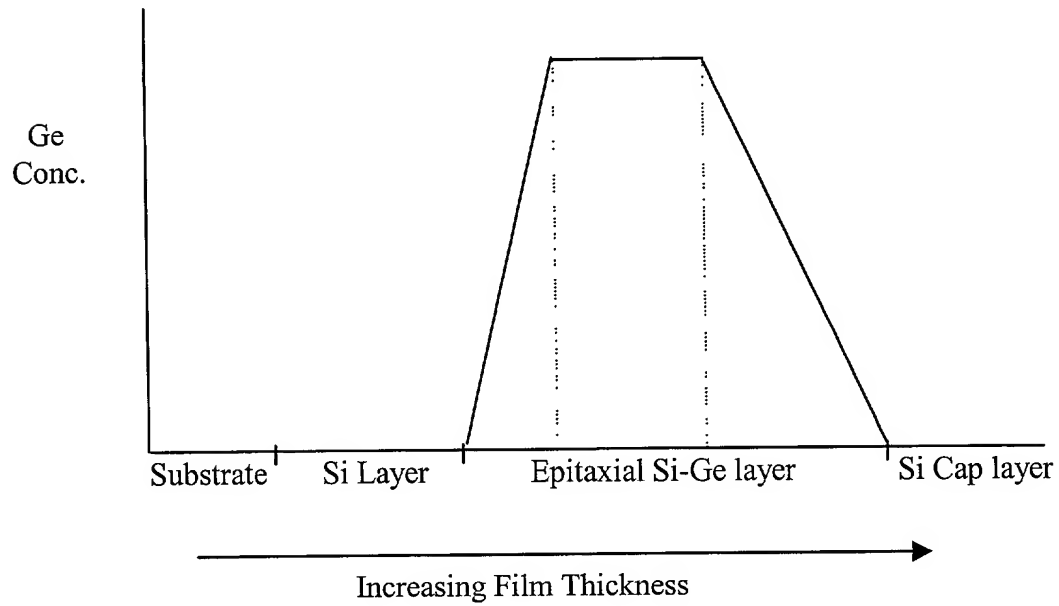


Figure 5: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 600°C

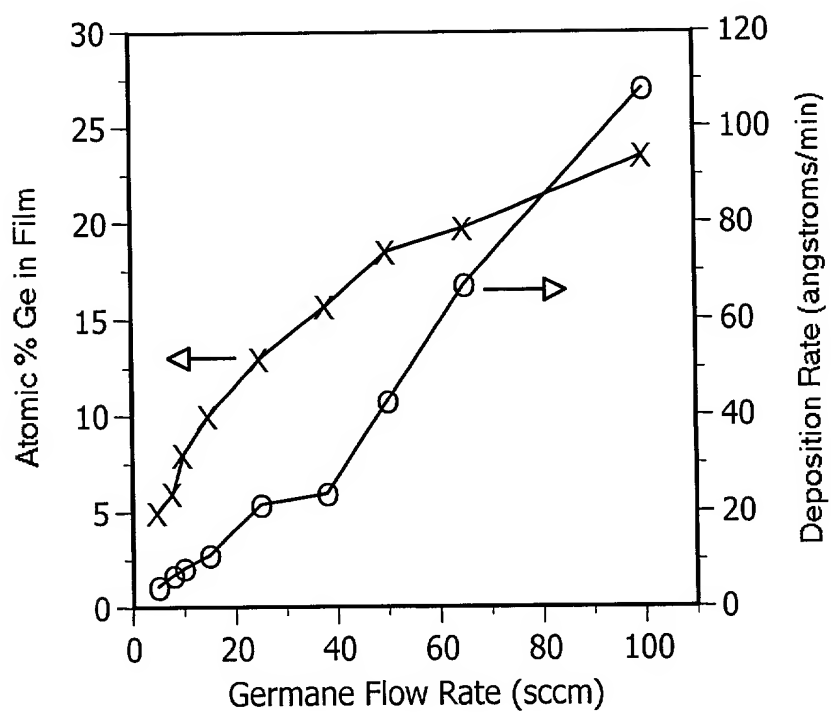


Figure 6: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 625°C

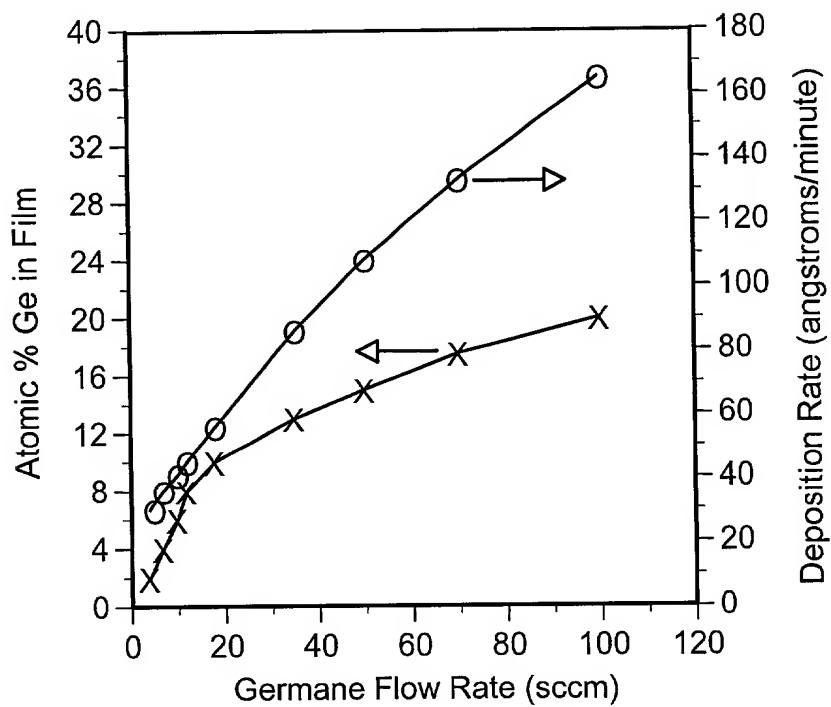


Figure 7: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 650°C

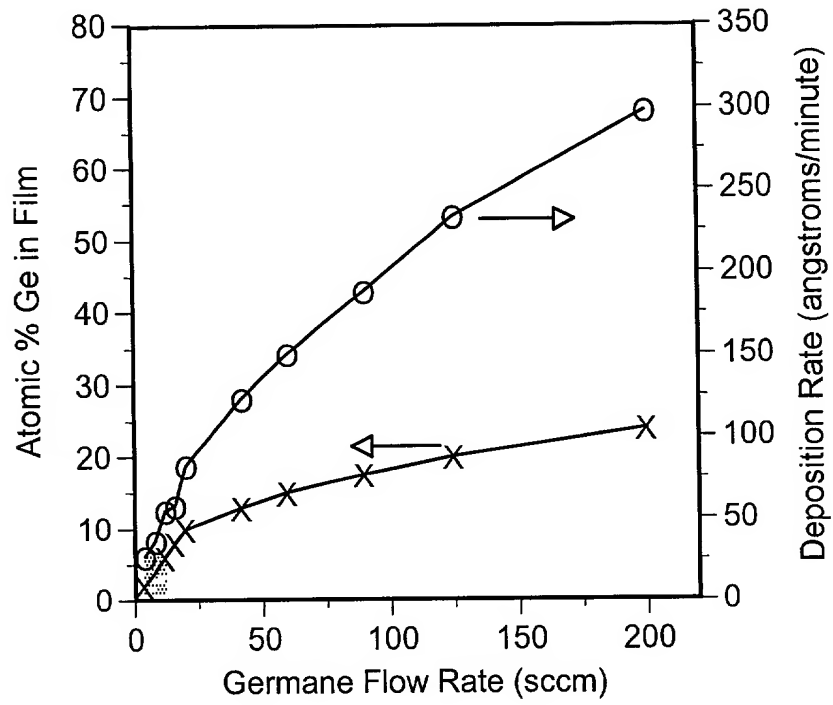


Figure 8: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 700°C

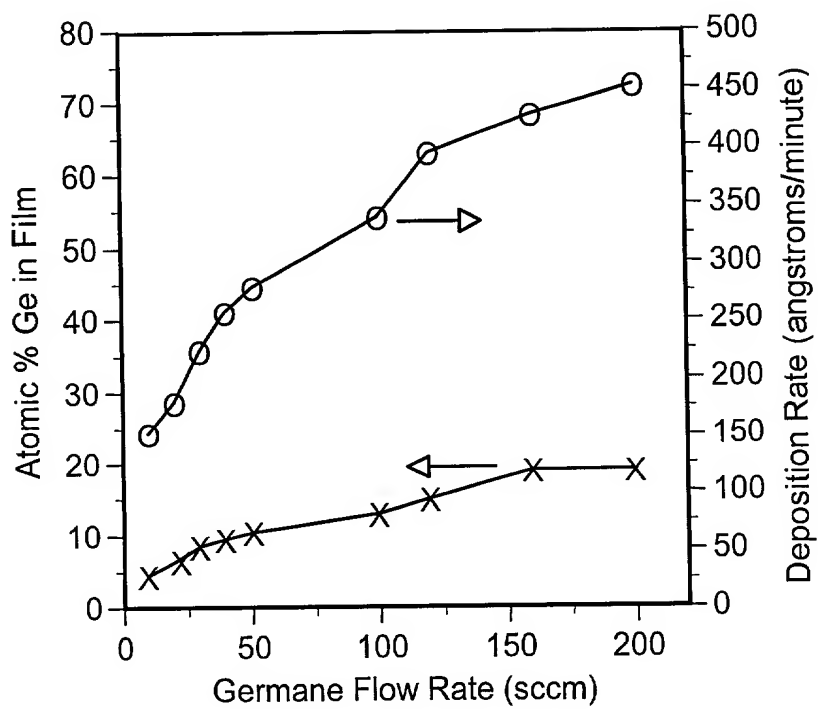


Figure 9: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H_2 Flow Rate = 20 slm)

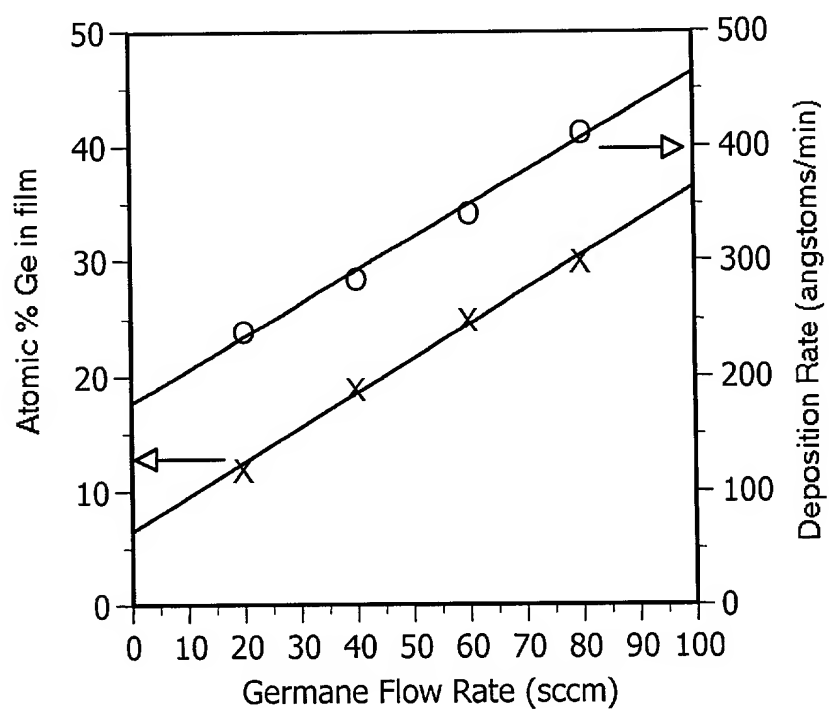


Figure 10: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H₂ Flow Rate = 30 slm)

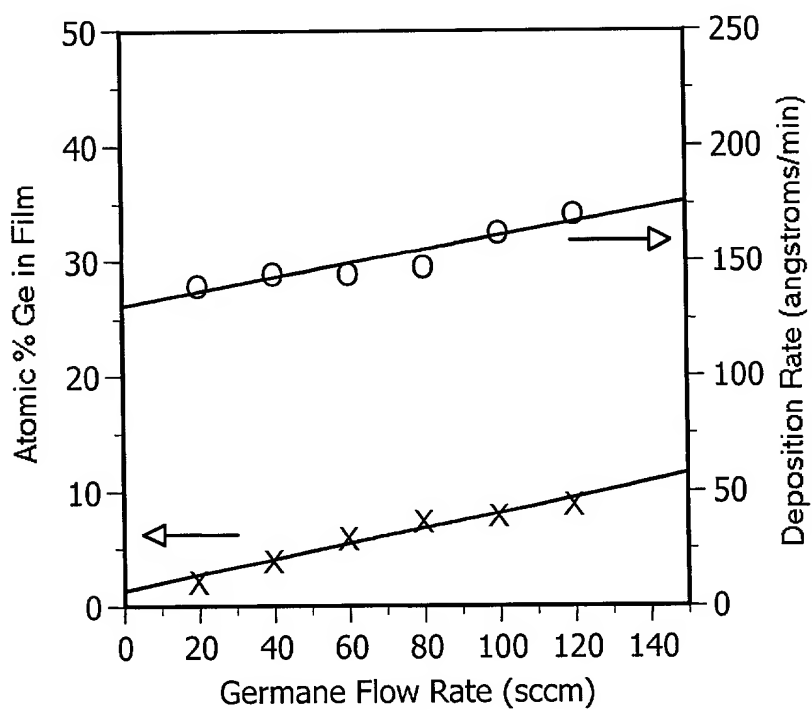


FIGURE 11

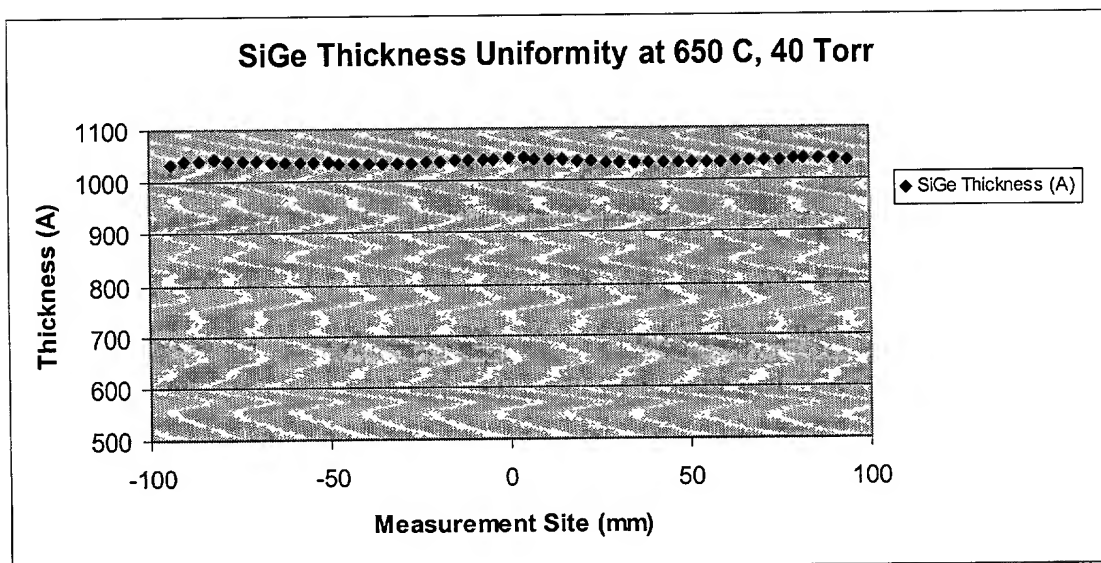


FIGURE 12
SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane

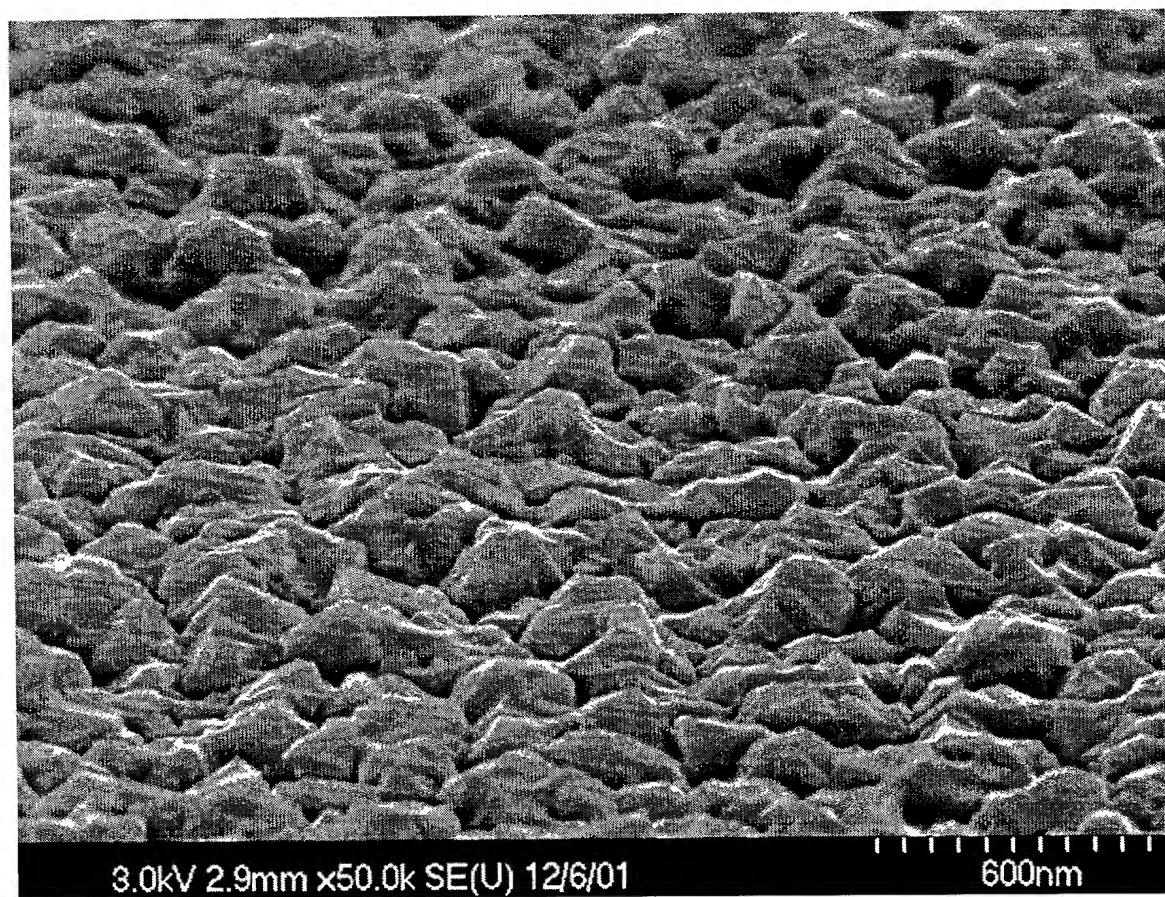
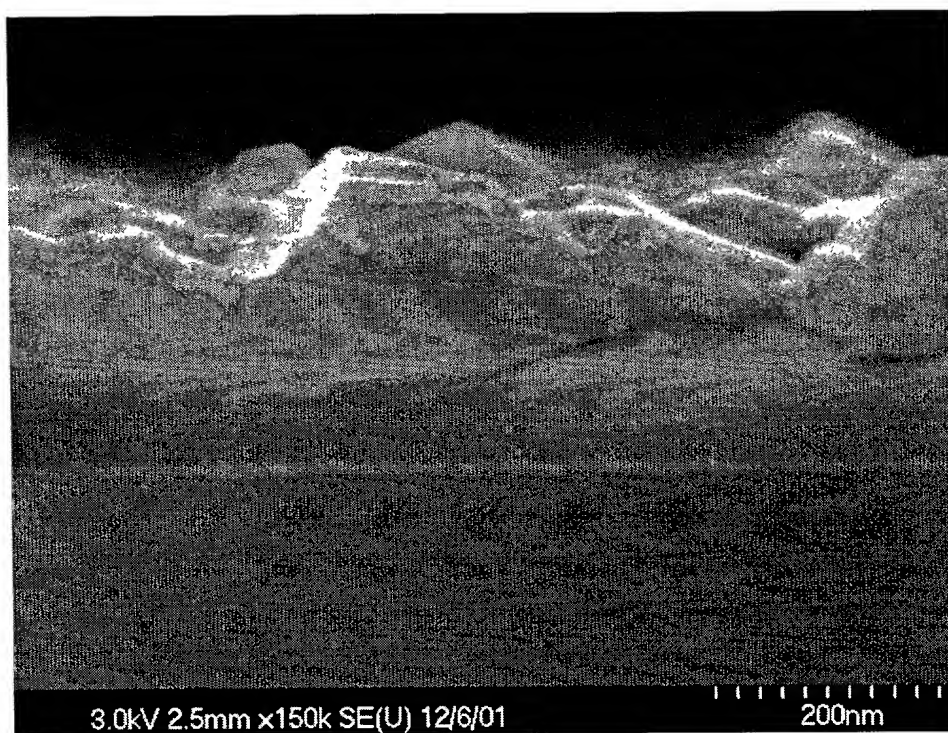


FIGURE 13
SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane



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FIGURE 14
SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane

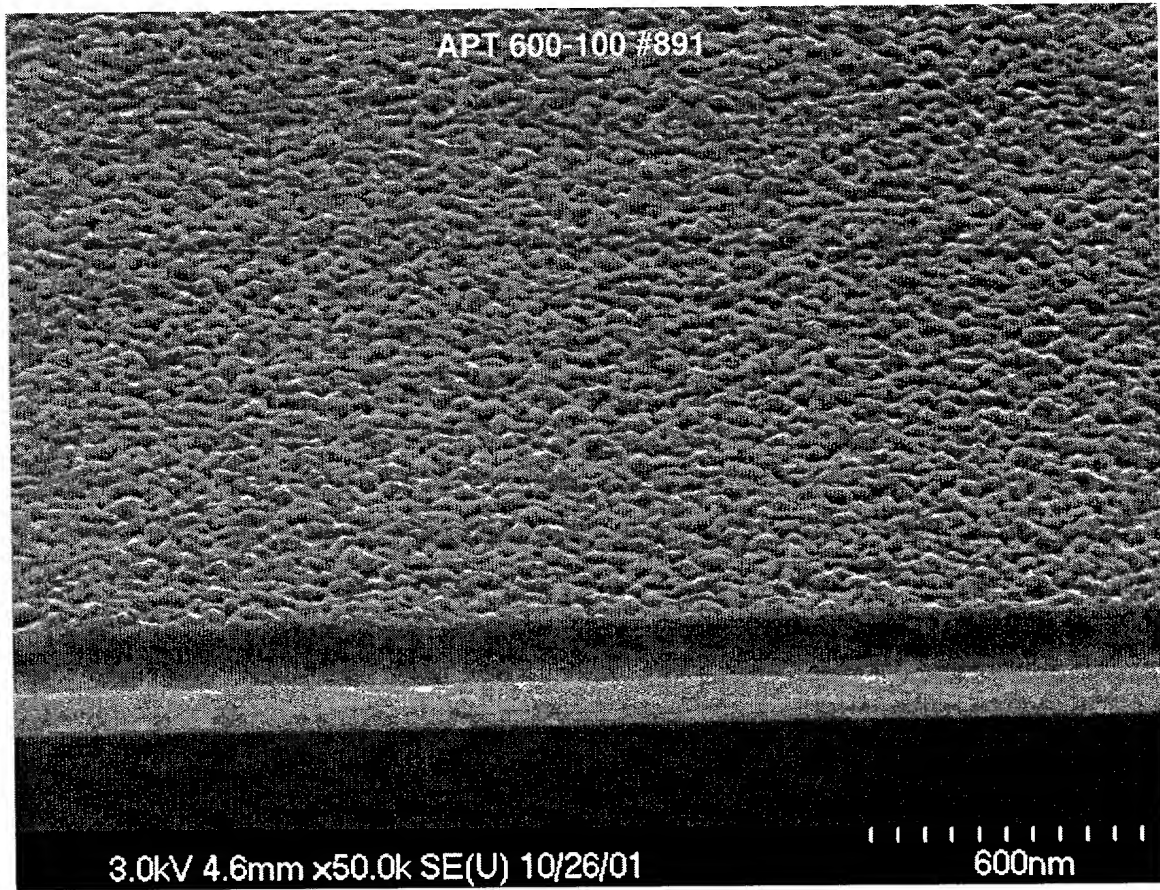


FIGURE 15
SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane

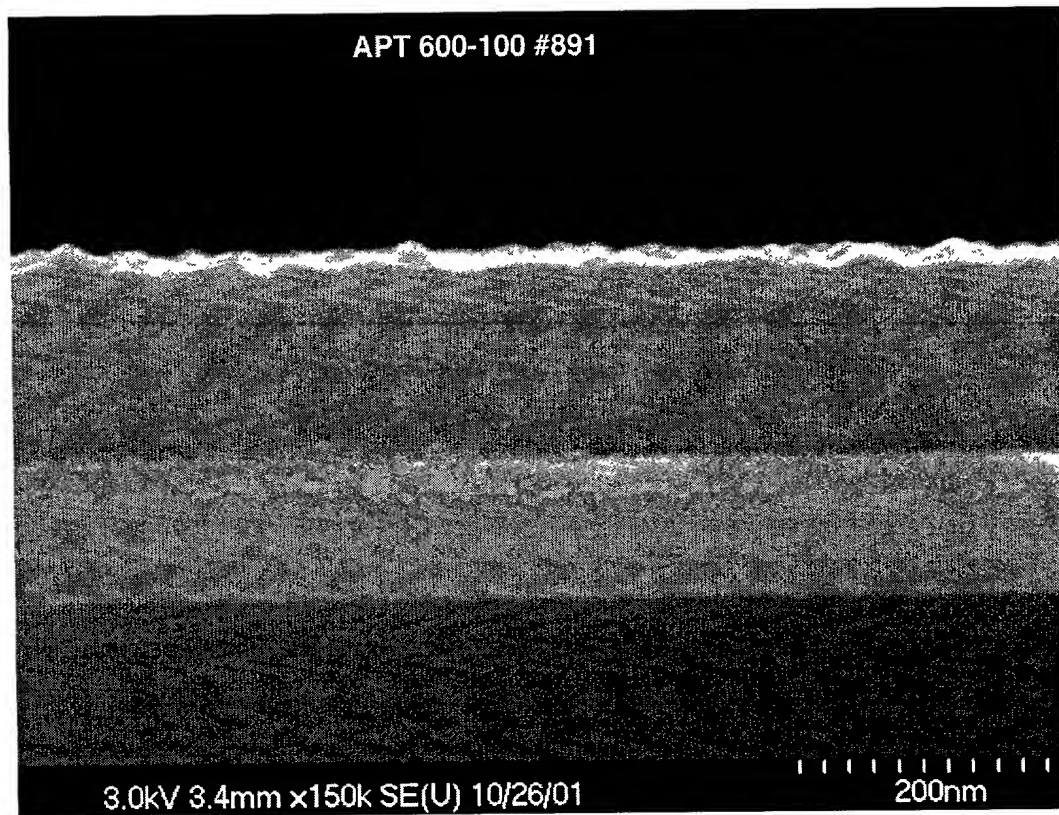


FIGURE 16

ARRHENIUS PLOT FOR SILANE, DISILANE AND TRISILANE

